

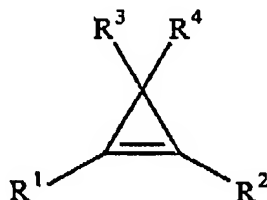
RECEIVED
CENTRAL FAX CENTER
OCT 07 2008

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the Application.

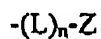
Listing of Claims

1. (Currently Amended) A compound of the formula:



wherein:

- a) one of R^1 and R^3 is H, and: (x) two of R^1 , R^2 , R^3 , and R^4 are H or (y) R^2 , R^3 , and R^4 are H or (z) R^1 , R^2 , and R^3 are H, and R^2 , R^4 ; and the other of R^1 and R^3 are independently selected from H and a group of the formula:

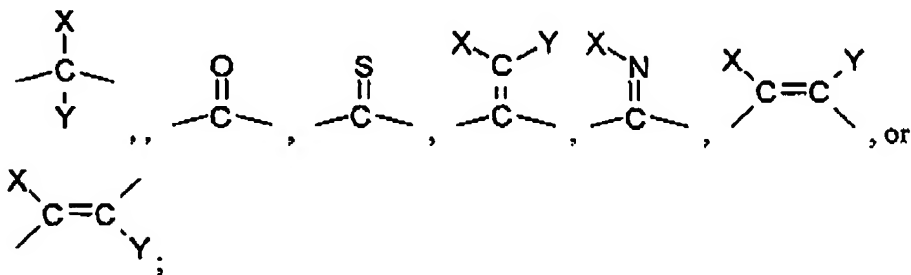


wherein:

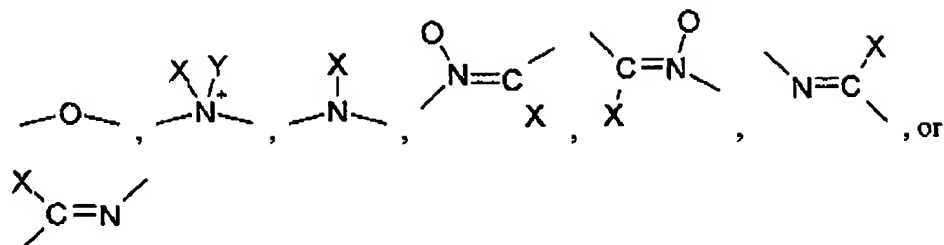
- i) n is an integer from 1 to 12;
ii) each L is independently selected from a member of the group D1, D2, E, or J

wherein:

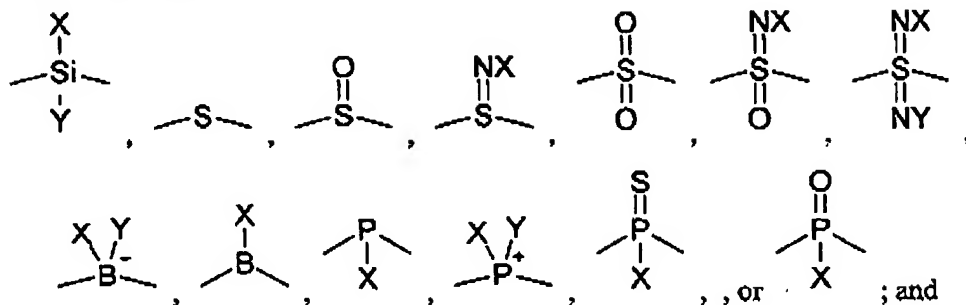
D1 is of the formula:



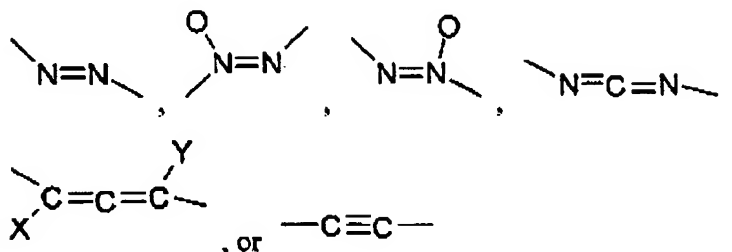
D2 is of the formula:



E is of the formula:

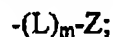


J is of the formula:



wherein:

A) each X and Y is independently a group of the formula:



and

B) m is an integer from 0 to 8; and

C) no more than two D2 or E groups are adjacent to each other and no J groups are adjacent to each other;

iii) each Z is independently selected from:

A) hydrogen, halo, cyano, nitro, nitroso, azido, chlorate, bromate, iodate, isocyanato, isocyanido, isothiocyanato, pentafluorothio, or

- B) a group G, wherein G is an unsubstituted or substituted; unsaturated, partially saturated, or saturated; monocyclic, bicyclic, tricyclic, or fused; 4 to 14 membered carbocyclic or heterocyclic ring system wherein;
- 1) when the ring system contains a 4 membered heterocyclic ring, the heterocyclic ring contains 1 heteroatom;
 - 2) when the ring system contains a 5, or more, membered heterocyclic ring or a polycyclic heterocyclic ring, the heterocyclic or polycyclic heterocyclic ring contains from 1 to 4 heteroatoms;
 - 3) each heteroatom is independently selected from N, O, and S;
 - 4) the number of substituents is from 0 to 5 and each substituent is independently selected from X;
- b) the total number of non-hydrogen atoms in each compound is 50 or less; and
- c) the total number of heteroatoms in $-(L)_n-Z$ is from 0 to 4; and
- d) either;
- i) R^1 or R^3 contains at least one group G; or
 - ii) at least one L group is an E group; or
 - iii) at least one of R^1 , R^2 , R^3 , and R^4 contains one to four non-hydrogen atoms and at least one of R^1 , R^2 , R^3 , and R^4 contains more than four non-hydrogen atoms;

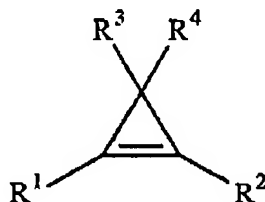
and its enantiomers, stereoisomers, salts, and mixtures thereof;

or a composition thereof;

provided that:

- a) $-(L)_n-Z$ is other than trimethylsilyl, trimethylsilylsulfonyl or thiol; and
- b) R^1 is other than phenylsulfonyl, phenylthioethyl, diphenylhydroxymethyl, benzo[g]quinolin-7-ol-1-methyl, a malonate derivative, a substituted 3-aminocyclohexenone, a dialkoxybenzylaminocarbonyl; and
- c) R^3 and R^4 are ~~is~~ other than 2-phenyl-ethenyl, phenylthio, (4-bromo-2-methylphenyl)carbamic acid N-carbonyl, (4-bromo-2-methylphenyl)carbamic acid ethyl ester N-carbonyl, a malonate derivative, aryloxy, dithioformyl, or a dialkoxybenzylaminecarbonyl.

2. (Withdrawn - Previously Presented) A method of inhibiting an ethylene response in a plant comprising the step of contacting the plant with an effective ethylene response-inhibiting amount of a cyclopropene derivative of the formula:



wherein:

- a) one of R^1 and R^3 is H and R^2, R^4 ; and the other of R^1 and R^3 are independently selected from H and a group of the formula:

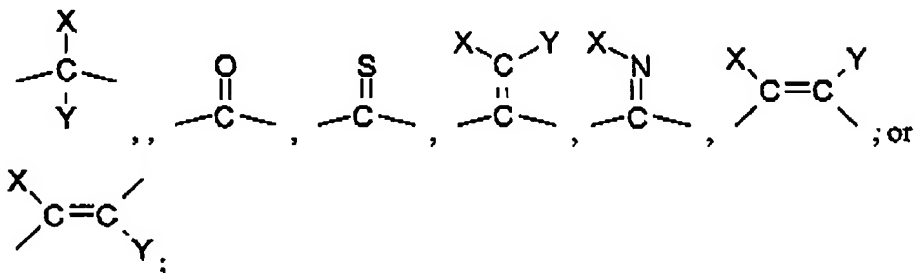


wherein:

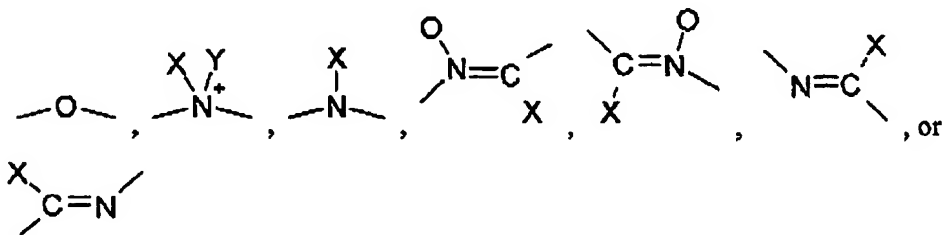
- i) n is an integer from 0 to 12;
 ii) each L is independently selected from a member of the group D1, D2, E, or J

wherein:

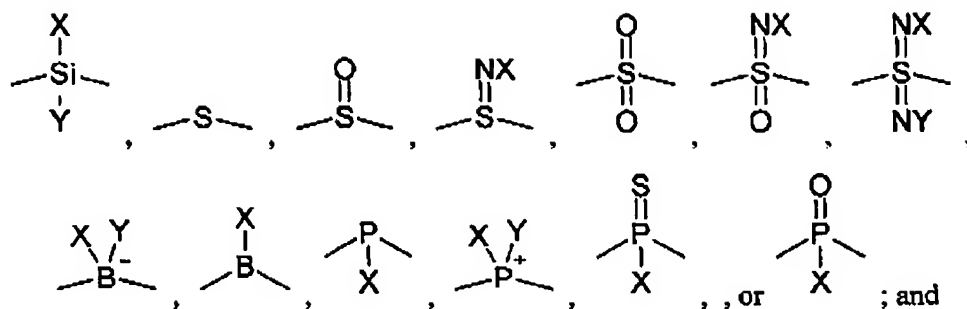
D1 is of the formula:



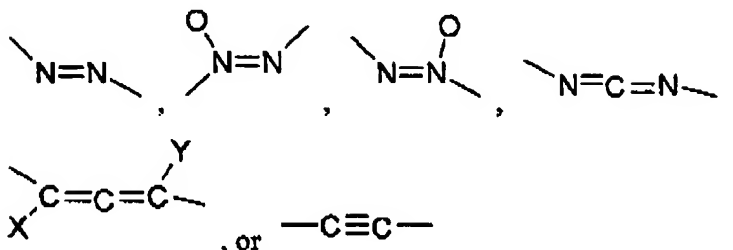
D2 is of the formula:



E is of the formula:



J is of the formula:



wherein:

A) each X and Y is independently a group of the formula:



and

B) m is an integer from 0 to 8; and

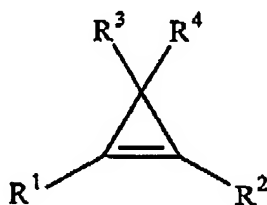
C) no more than two D2 or E groups are adjacent to each other and no J groups are adjacent to each other;

iii) each Z is independently selected from:

- A) hydrogen, halo, cyano, nitro, nitroso, azido, chlorate, bromate, iodate, isocyanato, isocyanido, isothiocyanato, pentafluorothio, or
- B) a group G, wherein G is an unsubstituted or substituted; unsaturated, partially saturated, or saturated; monocyclic, bicyclic, tricyclic, or fused; 3 to 14 membered carbocyclic or heterocyclic ring system wherein;
 - 1) when the ring system contains a 3 or 4 membered heterocyclic ring, the heterocyclic ring contains 1 heteroatom;
 - 2) when the ring system contains a 5, or more, membered heterocyclic ring or a polycyclic heterocyclic ring, the heterocyclic or polycyclic heterocyclic ring contains from 1 to 4 heteroatoms;

- 3) each heteroatom is independently selected from N, O, and S;
 - 4) the number of substituents is from 0 to 5 and each substituent is independently selected from X;
 - b) the total number of non-hydrogen atoms in each compound is 50 or less; and
 - c) the total number of heteroatoms in $-(L)_n-Z$ is from 0 to 4; and
 - d) either;
 - i) R^1 or R^3 contains at least one group G; or
 - ii) at least one L group is an E group; or
 - iii) at least one of R^1 , R^2 , R^3 , and R^4 contains one to four non-hydrogen atoms and at least one of R^1 , R^2 , R^3 , and R^4 contains more than four non-hydrogen atoms;
- and its enantiomers, stereoisomers, salts, and mixtures thereof;
- or a composition thereof;
3. (Withdrawn) The method of claim 2, wherein the ethylene response is one or more of ripening or senescence of flowers, fruits, and vegetables; abscission of foliage, flowers, and fruit; the shortening of life of ornamental plants, cut flowers, shrubbery, seeds, or dormant seedlings; inhibition of growth; stimulation of growth; auxin activity; inhibition of terminal growth; control of apical dominance; increase in branching; increase in tillering; changing the morphology of plants, modifying the susceptibility to plant pathogens such as fungi, changing bio-chemical compositions; abortion or inhibition of flowering or seed development; lodging effects; stimulation of seed germination; breaking of dormancy; hormone effects; and epinasty effects.
 4. (Withdrawn) The method of claim 2, wherein R^2 , R^3 , and R^4 are hydrogen or R^1 , R^2 , and R^3 are hydrogen.
 5. (Withdrawn) The method of claim 2, wherein n is from 1 to 7.
 6. (Withdrawn) The method of claim 2, wherein m is from 0 to 2.
 7. (Withdrawn) The method of claim 2, wherein:
 - a) each D1 is -CXY-, -CO-, or -CS-;
 - b) each D2 is -NX- or -O-;
 - c) each E is -S-, -SiXY-, or -SO₂-;

- d) each X and Y is independently H, halo, OH, SH, $-C(O)(C_1-C_4)alkyl$, $-C(O)O(C_1-C_4)alkyl$, $-O-(C_1-C_4)alkyl$, $-S-(C_1-C_4)alkyl$, or substituted or unsubstituted $(C_1-C_4)alkyl$; and
- e) each Z is independently H, halo, or G.
8. (Withdrawn) The method of claim 2, wherein each G is independently a substituted or unsubstituted; five, six, or seven membered; aryl, heteroaryl, heterocyclyl, or cycloalkyl ring.
9. (Withdrawn) The method of claim 8, wherein each G is independently a substituted or unsubstituted phenyl, pyridyl, cyclohexyl, cyclopentyl, pyrrolyl, furyl, thiophenyl, triazolyl, pyrazolyl, 1,3-dioxolanyl, or morpholinyl.
- 10.(Original) The method of claim 8, wherein the substituents, when present, are independently selected from 1 to 3 of methyl, methoxy, and halo.
11. (New) A compound of the formula:



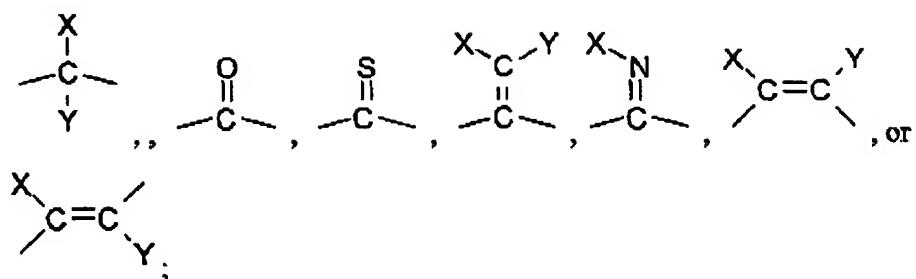
wherein:

- a) one of R^1 and R^3 is H, and: (x) two of R^1 , R^2 , R^3 , and R^4 are H or (y) R^2 , R^3 , and R^4 are H or (z) R^1 , R^2 , and R^3 are H, and R^2 , R^4 ; and the other of R^1 and R^3 are independently selected from H and a group of the formula:

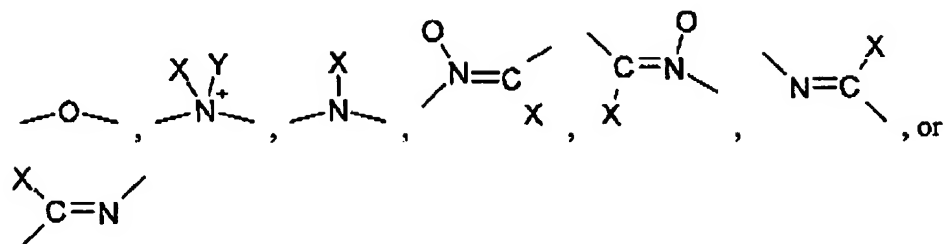


wherein:

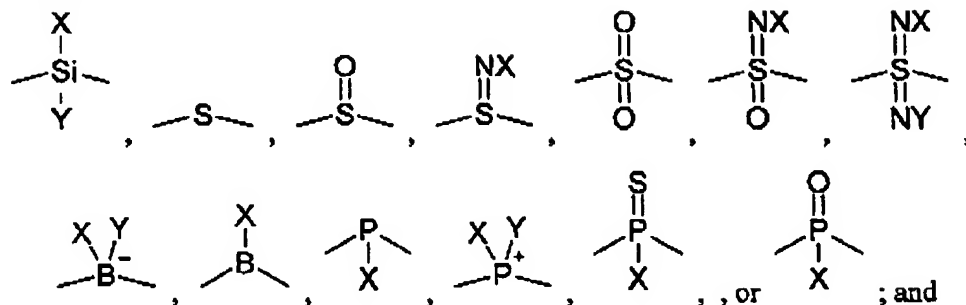
- i) n is an integer from 1 to 12;
- ii) each L is independently selected from a member of the group D1, D2, E, or J
 wherein:
 D1 is of the formula:



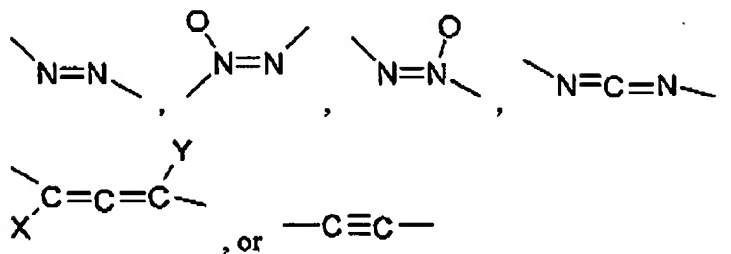
D2 is of the formula:



E is of the formula:



J is of the formula:



wherein:

A) each X and Y is independently a group of the formula:



and

B) m is an integer from 0 to 8; and

- C) no more than two D2 or E groups are adjacent to each other and no J groups are adjacent to each other;
- iii) each Z is independently selected from:
- A) hydrogen, halo, cyano, nitro, nitroso, azido, chlorate, bromate, iodate, isocyanato, isocyanido, isothiocyanato, pentafluorothio, or
- B) a group G, wherein G is an unsubstituted or substituted; unsaturated, partially saturated, or saturated; monocyclic, bicyclic, tricyclic, or fused; 4 to 14 membered carbocyclic or heterocyclic ring system wherein;
- 1) when the ring system contains a 4 membered heterocyclic ring, the heterocyclic ring contains 1 heteroatom;
 - 2) when the ring system contains a 5, or more, membered heterocyclic ring or a polycyclic heterocyclic ring, the heterocyclic or polycyclic heterocyclic ring contains from 1 to 4 heteroatoms;
 - 3) each heteroatom is independently selected from N, O, and S;
 - 4) the number of substituents is from 0 to 5 and each substituent is independently selected from X;
- b) the total number of non-hydrogen atoms in each compound is 50 or less; and
- c) the total number of heteroatoms in $-(L)_n-Z$ is from 0 to 4; and
- d) either;
- i) R^1 or R^3 contains at least one group G; or
 - ii) at least one L group is an E group;
- and its enantiomers, stereoisomers, salts, and mixtures thereof;
- or a composition thereof;

provided that:

- a) $-(L)_n-Z$ is other than trimethylsilyl, trimethylsilylsulfonyl or thiol; and
- b) R^1 is other than phenylsulfonyl, phenylthioethyl, diphenylhydroxymethyl, benzo[g]quinolin-7-yl-1-methyl, a malonate derivative, a substituted 3-aminocyclohexenone, a dialkoxybenzylaminocarbonyl; and
- c) R^3 and R^4 are other than 2-phenyl-ethenyl, phenylthio, (4-bromo-2-methylphenyl)carbamic acid N-carbonyl, (4-bromo-2-methylphenyl)carbamic

acid ethyl ester N-carbonyl, a malonate derivative, aryloxy, dithioformyl, or a dialkoxybenzylaminecarbonyl.